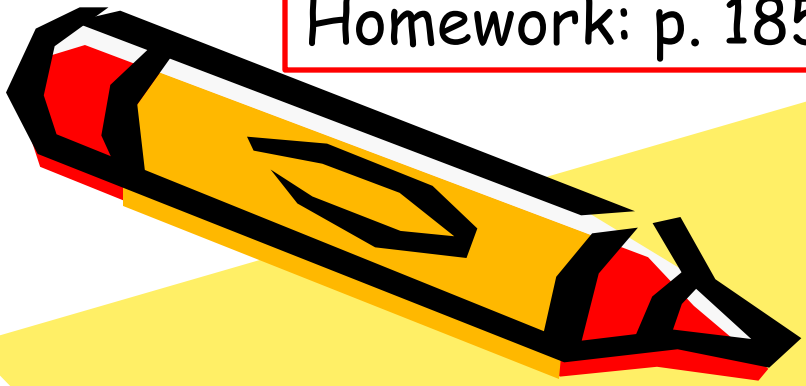


Homework: p. 185 #31, 34, 43 & 44 (36-42 mentally)



Wednesday, September 26, 2012

TISK Problems

1. Simplify: $-\sqrt{\frac{9}{25}}$
2. Factor completely: $-3x^2 - 9x + 6$
3. Decide whether the following statement is *always*, *sometimes*, or *never* true: Adjacent angles are vertical angles.

No mental math questions today.

§4.1 Triangles & Angles



Definitions

- **Equilateral** Triangle

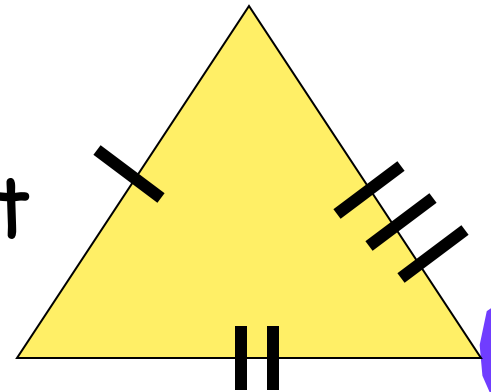
All 3 sides are congruent.

- **Isosceles** Triangle

At least 2 sides are congruent

- **Scalene** Triangle

No sides are congruent.



These are classifications by SIDES.

Definitions, continued.



- **Acute Triangle**

All 3 angles are acute.

- **Equiangular Triangle**

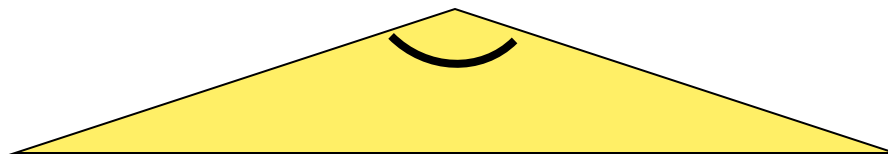
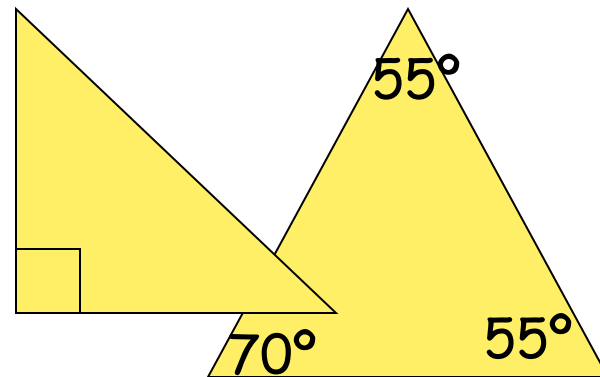
All 3 angles are congruent (is also acute).

- **Right Triangle**

One right angle.

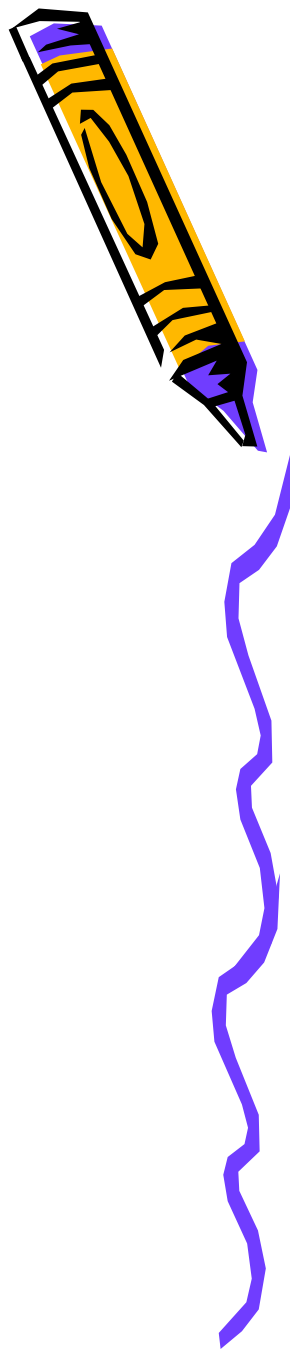
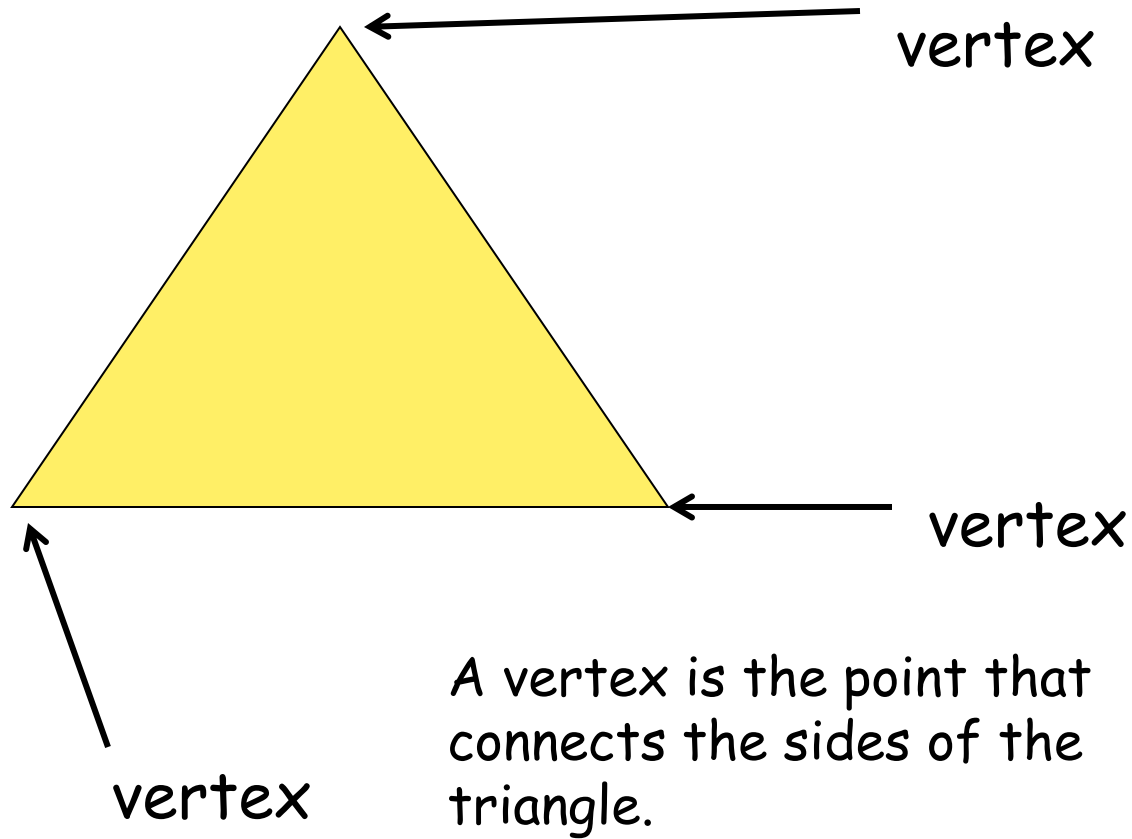
- **Obtuse Triangle**

One obtuse angle.

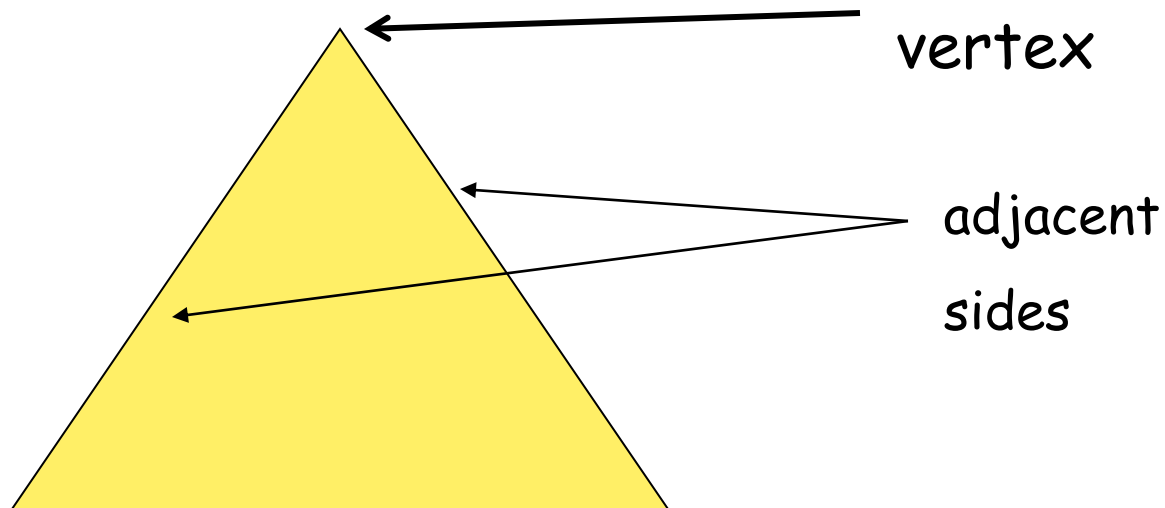


These are classifications by **ANGLES**.

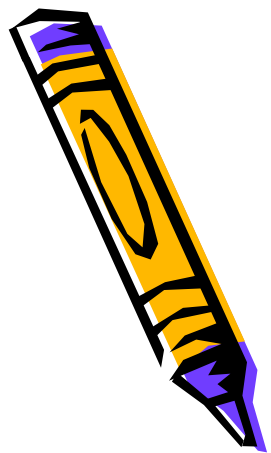
More Definitions



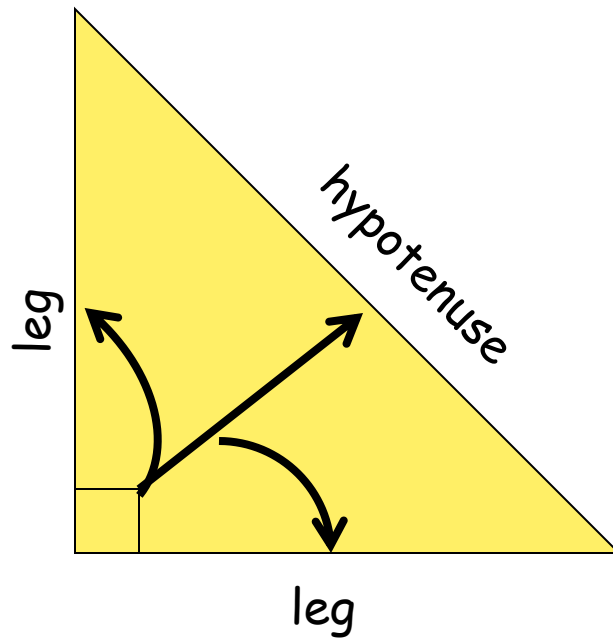
More Definitions



Two sides with a common vertex
are adjacent.

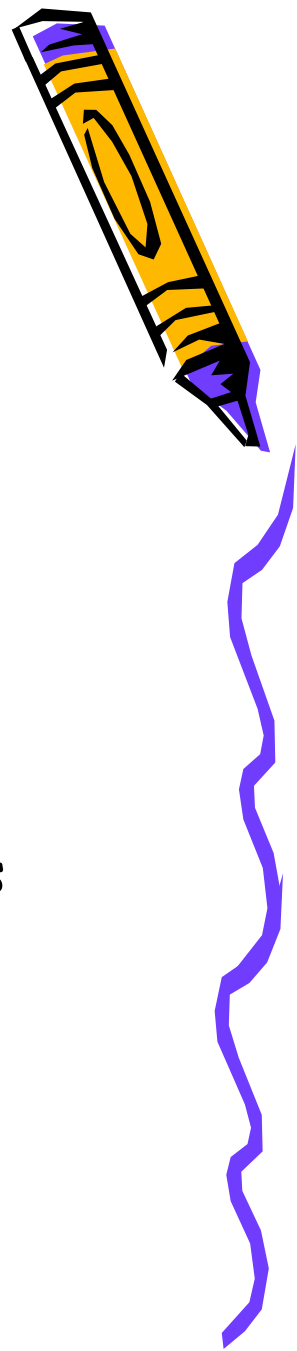


More Definitions

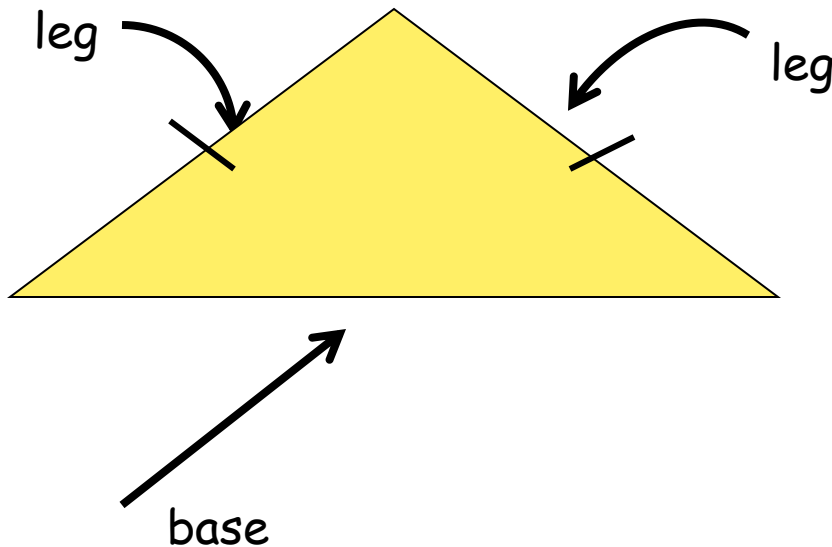


Hypotenuse: the side of a right triangle that is opposite the right angle.

Legs: adjacent sides that form the right angle in a right triangle.

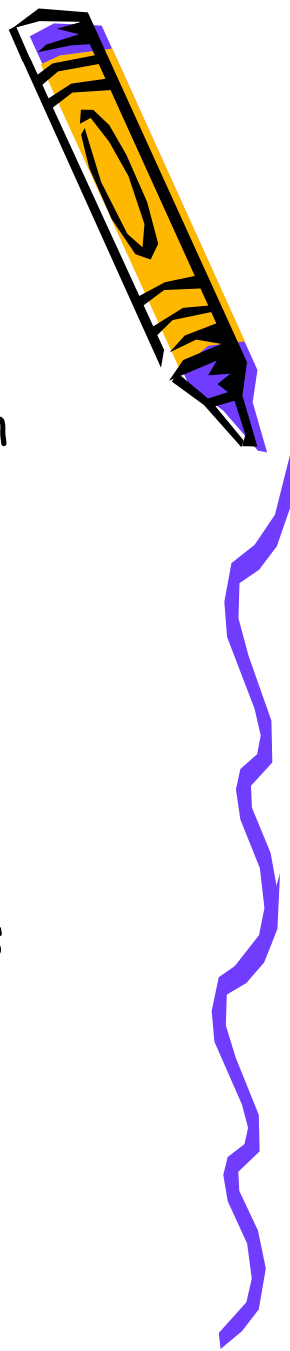


More Definitions

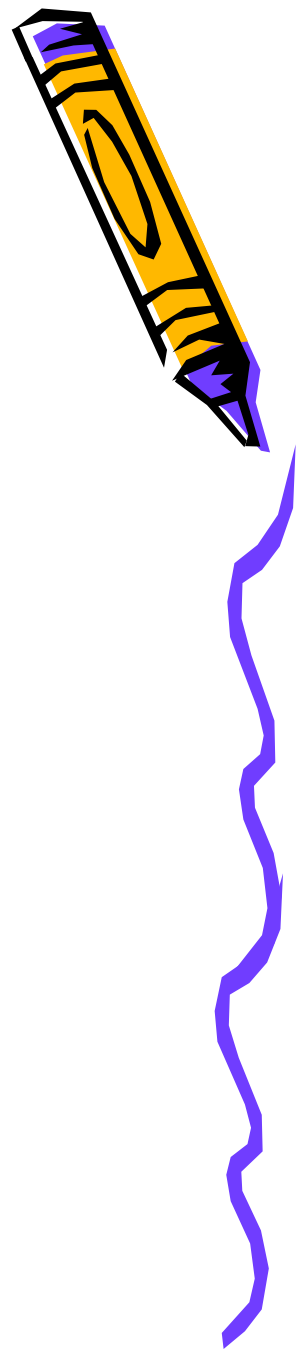
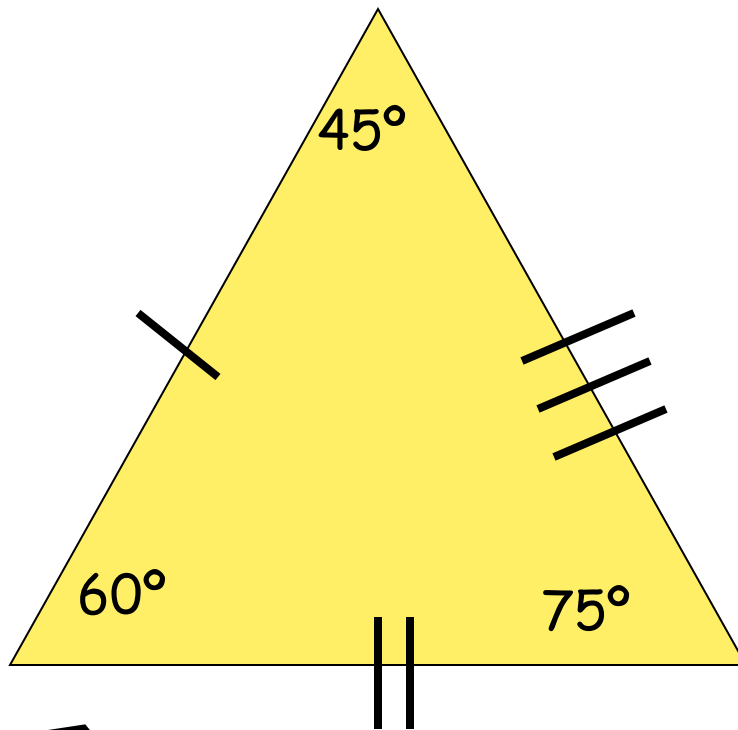


Base: the side of an isosceles triangle that is not (necessarily) congruent to the other two sides.

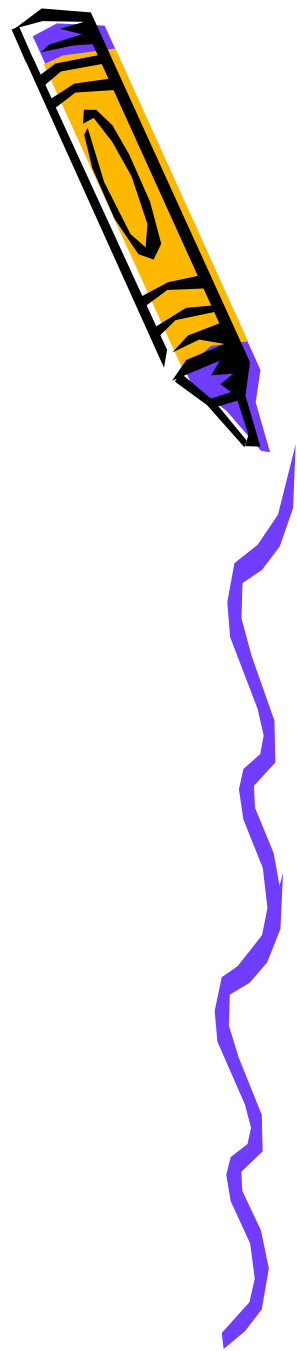
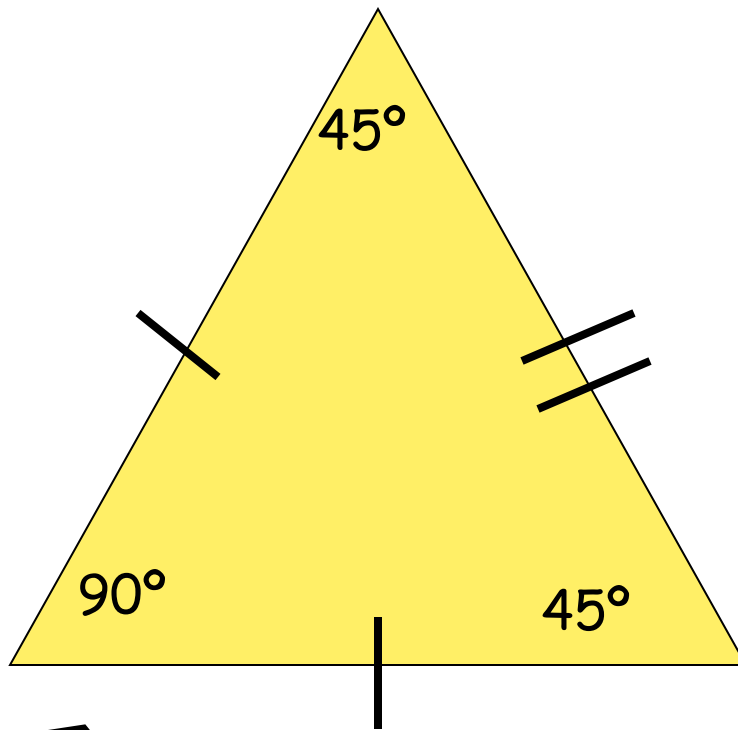
Legs: the congruent sides of an isosceles triangle.



Classify the triangle by
its angles and its sides.



Classify the triangle by
its angles and its sides.



How many degrees does a
triangle have?
How do you know?

